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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,598	04/12/2004	Edward Gilbert Shaw	03936-P0019A	3550
24126	7590	05/27/2005	EXAMINER	
ST. ONGE STEWARD JOHNSTON & REENS, LLC			MICHALSKY, GERALD A	
986 BEDFORD STREET			ART UNIT	
STAMFORD, CT 06905-5619			PAPER NUMBER	

3753

DATE MAILED: 05/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/822,598	Applicant(s) SHAW ET AL.	
	Examiner Gerald A. Michalsky	Art Unit 3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 May 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) 1-9 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 32-38 is/are allowed.
- 6) ☒ Claim(s) 10-31 and 39-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                                                       |                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                           | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>13 December 2004</u> . | 6) <input type="checkbox"/> Other: _____                                                |

### DETAILED ACTION

1. Acknowledgment is made of applicants' claim for foreign priority based on applications filed in the United Kingdom on 10 October 2001 and 15 May 2002. It is noted, however, that applicants have not filed certified copies of the United Kingdom applications as required by 35 U.S.C. 119(b).

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 10-13, 15-16, 18-31, and 41-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Leiber. These claims are anticipated by Figure 10 of Leiber. Claims 22 and 23 are functional and are not fully structurally supported.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Leiber in view of Fujiwara et al. This claim is considered met by Figure 10 of Leiber except for a piezoelectric actuator. Fujiwara et al discloses a piezoelectric actuator for a three-way valve. It would have been obvious in view of Fujiwara et al to substitute a piezo-electrically actuated valve for the solenoid operated valve 71 of Figure 10 of Leiber since such a valve would function equivalently.

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Leiber in view of Foster et al. This claim is considered met by Figure 10 of Leiber except that the supply to the main valve of Figure 10 of Leiber does not serve to supply the pilot valve 71 of Leiber. Figures 2-6 of Foster et al shows a pilot supply passage 128 which is connected to main valve supply 32. It would have been obvious in view of Foster et al to utilize the supply of the main valve as a convenient supply for the pilot valve 71 of Figure 10 of Leiber, if desired.

7. Claims 25, 29-31, and 39-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant does not disclose a "normally open exhaust seat" as specified in claim 25, line 4. There is no antecedent basis for "the solenoid" in line 2 of claims 29, 30, and 31. There is no antecedent basis for "the control volume" in line 3 of claims 29 and 30. Claims 39 and 40 are "omnibus" claims which do not particularly point out the invention.

8. Claims 32-38 are allowed.

9. Claims 1-9 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention. Election was made **without** traverse in the reply filed on 19 May 2005.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald A. Michalsky whose telephone number is (571) 272-4917. The examiner can normally be reached on M-F 5:30 AM - 2 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on (571) 272-4930. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Gerald A. Michalsky  
Primary Examiner  
Art Unit 3753